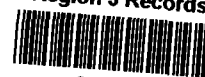




EPA Region 5 Records Ctr.



258542

August 10, 2005

Mr. Nabil S. Fayoumi
U. S. EPA - Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

**Re: Sauget Area 2 Site – October 3, 2002 Unilateral Administrative Order
(UAO) Groundwater Operable Unit
Monthly Report; July 1 - July 31, 2005 Reporting Period**

Dear Nabil:

Attached is the Monthly Report for the Sauget Area 2 Site October 3, 2002 Unilateral Administrative Order (UAO) - Groundwater Operable Unit. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section XII, paragraph 62, Progress Reports. This report is for the period July 1 – July 31, 2005.

Sincerely,

A handwritten signature in black ink, appearing to read "S.D. Smith", with a stylized flourish at the end.

Steven D. Smith
Project Coordinator

cc: Ken Bardo, - U. S. EPA
Mayor Sauget - Sauget, IL
Sandra Bron – IEPA
Mike Coffey - USFWS
Village of Sauget – c/o P. H. Weis & Associates (Attn: Brian Nelson)
Mayor Frank Bergman – Cahokia
L. Glen Kurowski - Monsanto
Cathleen Bumb – Solutia
Linda Tape - Husch & Eppenberger
Richard Williams – Solutia

Sauget Area 2 Site - Sauget, Illinois

October 3, 2002 UAO – Groundwater Operable Unit

Status Report

Date of Report: August 10, 2005
Period Covered: July 1 - July 31, 2005

Agency Actions / Communications

In an e-mail message dated June 19, 2003, U. S. EPA requested the submission of revised versions of the Focused Feasibility Study, the Remedial Design Work Plan, and the Pre-Final (95%) Remedial Design. The revisions were required to allow the use of a slurry wall rather than jet grouting for construction of the barrier wall. The revised documents were submitted on July 3, 2003. The ESD was issued by US EPA on July 30, 2003. The Final Design Submittals were approved by EPA on October 16, 2003.

Work Performed During the Reporting Period

General Site Work

- By the end of June, all site restoration work, including the cover over the temporary spoils stockpile, had been completed and the contractors had demobilized from the site.
- The draft Operations and Maintenance (O&M) Plan was submitted to the Agencies for review on June 21, 2005 and remained under review during the reporting period.
- The Pre-Final Inspection was conducted on June 28, 2005. The only item that was identified as requiring completion before the Final Inspection was conducting a pressure test on the discharge pipeline. That test was successfully completed on July 14th. The only other punch list items were identified as O&M tasks, and included;
 - Inspection of the pitless adapter in one or both of EW-1 and EW-2.
 - Comparison over time of the flow meter readings from the totalizing flow meter at the POTW discharge point with the readings from the individual flow meters on each of the extraction wells.

- Development of a well abandonment plan for the wells on Site R that will not be used in the future. This plan is to be submitted with the Final Report.
- Reseeding the disturbed areas on the site in the fall of 2005.

On July 19th, the Agency was requested by e-mail to complete a Final Inspection and issue a Construction Complete notice.

Groundwater Treatment

- For the majority of the month, the system was operated to maintain the total pumping rate equal to the computed inflow rate, based on the average of the gradients measured in four pairs of piezometers placed immediately upgradient of the Site R landfill. This control system will remain in place during a 90-day Interim Operating Period. At a meeting held on July 20th, it was agreed that that period will begin on August 1st.

For the first week of the month, only well EW-2 was operated, while EW-1 and EW-3 remained idle. The flow rate was then manually increased to the maximum system capacity on July 17 to investigate the system response to high flow rates. The flow rate was then gradually decreased to about 1,500 gpm over the period of July 9th to July 10th.

The system was taken off line between July 11th and July 19th to perform a pressure test to establish the integrity of the discharge pipeline. Once that test was complete and the piping was reassembled, the pumping system was restarted at the maximum rate of about 2,200 gpm and that flow rate was maintained until July 22nd, when automatic control was reinstated.

- A leak was observed from extraction well EW-3 on June 6th and the well was shut down immediately. The well casing was exposed and two small holes were observed in the pitless adapter at the T-connection with the discharge piping. The well was repaired and was put back into service on June 22nd. The soil that came into contact with the groundwater that leaked from the well was covered with HDPE and two samples of the potentially impacted material were analyzed for TCL and TAL constituents. The results showed that the material did not contain any constituents above Preliminary Remediation Goals and permission was requested from the Agency to leave the affected soils in place. EPA has verbally approved this request.
- Analyses of the step testing data to derive hydraulic conductivity values for the aquifer materials have proven to be impossible, even with the use of numerical modeling. A report on the analyses, with that conclusion, was submitted on June 20th. The Agency has requested that additional details of the modeling be submitted for review.

- First Quarter groundwater samples of the performance monitoring wells were being analyzed during the reporting period.
- Water level and pumping data for the month of June are attached.

Schedule

The remedial construction at Site R is considered to be complete and the O&M period will begin as soon as the Agency issues a Construction Complete notice.

Submittals During Reporting Period

There were no submittals during the reporting period.

Work Scheduled for Next Reporting Period

- Submit additional information or hold an additional discussion on the step test analyses.
- Continue pumping and treating groundwater using the new control program.
- Perform the Final Inspection.
- Analyze groundwater samples from the performance monitoring wells.

PUMPING DATA

		PUMPING RATE						GROUNDWATER LEVELS			
Date/Time		Computed Q	Total Q	EW-1 Q	EW-2 Q	EW-3 Q	SWL	PZ-5U	PZ-5D	Delta	PZ-6U
07/01/2005	Daily Average	184.65	301.46	0.00	301.46	0.00	391.43	393.65	393.33	-0.32	393.59
07/02/2005	Daily Average	201.97	222.83	0.00	222.83	0.00	390.85	393.53	393.21	-0.32	393.51
07/03/2005	Daily Average	218.15	225.68	0.00	225.68	0.00	390.79	393.44	393.10	-0.35	393.45
07/04/2005	Daily Average	224.42	241.92	0.00	241.92	0.00	391.00	393.44	393.03	-0.41	393.37
07/05/2005	Daily Average	192.21	525.27	0.00	525.27	0.00	390.88	393.26	392.94	-0.31	393.18
07/06/2005	Daily Average	397.94	711.54	0.90	709.60	1.03	390.58	393.08	392.68	-0.40	393.40
07/07/2005	Daily Average	568.74	1461.02	386.45	702.62	371.95	390.35	392.65	392.27	-0.37	392.79
07/08/2005	Daily Average	418.13	1978.80	674.91	658.09	645.79	390.11	392.21	391.74	-0.46	391.55
07/09/2005	Daily Average	385.05	1666.40	600.02	600.03	466.36	390.00	392.17	391.64	-0.53	391.31
07/10/2005	Daily Average	406.58	1392.31	600.03	600.02	192.27	389.03	391.98	391.42	-0.56	391.20
07/11/2005	Daily Average	363.03	565.94	262.03	260.36	43.55	387.85	392.07	391.49	-0.58	391.50
07/12/2005	Daily Average	361.35	0.00	0.00	0.00	0.00	387.22	392.35	391.70	-0.65	392.01
07/13/2005	Daily Average	455.62	0.00	0.00	0.00	0.00	386.55	392.32	391.60	-0.72	391.99
07/14/2005	Daily Average	528.28	0.00	0.00	0.00	0.00	385.48	392.23	391.39	-0.84	392.02
07/15/2005	Daily Average	535.65	0.00	0.00	0.00	0.00	385.38	392.16	391.31	-0.85	391.97
07/16/2005	Daily Average	562.37	0.00	0.00	0.00	0.00	384.44	391.97	391.09	-0.88	391.87
07/17/2005	Daily Average	624.89	0.00	0.00	0.00	0.00	383.28	391.83	390.82	-1.01	391.73
07/18/2005	Daily Average	698.30	0.00	0.00	0.00	0.00	382.26	391.65	390.52	-1.14	391.59
07/19/2005	Daily Average	844.90	1191.50	425.31	343.18	423.02	381.94	391.13	389.95	-1.18	390.93
07/20/2005	Daily Average	1000.99	2140.20	758.81	588.35	793.03	381.16	390.38	389.08	-1.30	389.85
07/21/2005	Daily Average	924.00	2110.71	744.50	581.34	784.88	381.11	389.98	388.73	-1.25	389.31
07/22/2005	Daily Average	846.60	1574.15	560.75	444.08	569.33	381.42	389.76	388.57	-1.19	389.10
07/23/2005	Daily Average	756.56	755.98	251.98	252.00	252.00	380.81	389.87	388.68	-1.19	389.36
07/24/2005	Daily Average	780.59	781.18	260.40	260.31	260.46	380.68	389.70	388.53	-1.16	389.29
07/25/2005	Daily Average	686.48	687.27	229.16	229.06	229.05	381.93	389.65	388.61	-1.05	389.24
07/26/2005	Daily Average	657.10	639.76	215.96	218.52	205.28	382.66	389.68	388.68	-1.01	389.26
07/27/2005	Daily Average	632.13	632.68	210.88	210.89	210.91	382.40	389.53	388.54	-0.99	389.13
07/28/2005	Daily Average	669.45	692.86	232.64	222.93	237.30	381.90	389.44	388.43	-1.02	389.06
07/29/2005	Daily Average	649.79	815.08	285.03	245.35	284.70	382.60	389.36	388.37	-0.99	388.85
07/30/2005	Daily Average	635.28	634.69	243.14	148.44	243.12	382.25	389.31	388.32	-1.00	388.76
07/31/2005	Daily Average	667.01	667.08	255.71	155.65	255.71	381.43	389.20	388.15	-1.05	388.66

Date/Time		PZ-6D	Delta	PZ-7U	PZ-7D	Delta	PZ-8U	PZ-8D	Delta	PZ-1_OUTSIDE	PZ-1_INSIDE
07/01/2005	Daily Average	394.05	0.46	393.92	394.45	0.53	393.40	392.84	-0.55	391.68	391.68
07/02/2005	Daily Average	393.98	0.46	393.86	394.38	0.53	393.30	392.67	-0.63	391.30	391.69
07/03/2005	Daily Average	393.94	0.50	393.78	394.36	0.58	393.24	392.56	-0.68	391.22	391.60
07/04/2005	Daily Average	393.89	0.52	393.67	394.28	0.61	393.17	392.51	-0.65	391.33	391.49
07/05/2005	Daily Average	393.63	0.45	393.54	394.05	0.51	393.05	392.47	-0.58	391.27	391.15
07/06/2005	Daily Average	393.41	0.01	393.51	393.42	-0.09	393.01	392.34	-0.67	391.05	390.69
07/07/2005	Daily Average	392.41	-0.38	392.77	392.33	-0.43	392.66	391.93	-0.73	390.75	388.45
07/08/2005	Daily Average	391.33	-0.22	391.87	391.62	-0.26	392.03	391.48	-0.55	390.38	385.90
07/09/2005	Daily Average	391.18	-0.13	391.71	391.41	-0.30	391.90	391.40	-0.50	390.26	386.16
07/10/2005	Daily Average	391.07	-0.13	391.71	391.48	-0.23	391.94	391.27	-0.67	389.67	386.16
07/11/2005	Daily Average	391.54	0.04	391.86	391.79	-0.07	392.05	391.19	-0.86	389.12	388.15
07/12/2005	Daily Average	392.17	0.15	392.39	392.41	0.01	392.30	391.10	-1.19	388.80	390.37
07/13/2005	Daily Average	392.18	0.19	392.42	392.39	-0.03	392.24	390.97	-1.27	388.42	390.46
07/14/2005	Daily Average	392.17	0.16	392.41	392.38	-0.03	392.15	390.66	-1.49	387.77	390.43
07/15/2005	Daily Average	392.12	0.15	392.35	392.32	-0.03	392.07	390.55	-1.52	387.69	390.38
07/16/2005	Daily Average	391.98	0.11	392.21	392.19	-0.03	391.89	390.30	-1.59	387.14	390.22
07/17/2005	Daily Average	391.84	0.11	375.77	375.73	-0.03	375.41	373.73	-1.68	386.47	390.10
07/18/2005	Daily Average	391.69	0.10	391.97	391.91	-0.06	391.55	389.64	-1.91	385.81	389.92
07/19/2005	Daily Average	390.84	-0.09	391.41	391.09	-0.32	391.01	389.17	-1.84	385.50	387.16
07/20/2005	Daily Average	389.58	-0.27	390.38	389.74	-0.64	390.06	388.37	-1.69	384.83	383.72
07/21/2005	Daily Average	389.12	-0.20	389.83	389.25	-0.58	389.61	388.02	-1.59	384.59	383.21
07/22/2005	Daily Average	388.98	-0.12	389.53	388.95	-0.58	389.35	387.80	-1.55	384.54	383.83
07/23/2005	Daily Average	389.43	0.07	389.86	389.64	-0.22	389.64	387.85	-1.79	384.26	386.13
07/24/2005	Daily Average	389.36	0.07	389.83	389.55	-0.28	389.55	387.69	-1.87	384.05	386.04
07/25/2005	Daily Average	389.35	0.10	389.70	389.52	-0.18	389.46	387.74	-1.72	384.62	386.24
07/26/2005	Daily Average	389.38	0.12	389.74	389.54	-0.20	389.50	387.88	-1.62	385.02	386.35
07/27/2005	Daily Average	389.25	0.12	389.61	389.44	-0.17	389.38	387.81	-1.57	384.83	386.23
07/28/2005	Daily Average	389.15	0.09	389.53	389.34	-0.19	389.28	387.61	-1.67	384.51	386.08
07/29/2005	Daily Average	389.00	0.15	389.41	389.18	-0.24	389.16	387.63	-1.53	384.82	385.63
07/30/2005	Daily Average	389.01	0.25	389.38	389.19	-0.20	389.14	387.59	-1.54	384.65	385.88
07/31/2005	Daily Average	388.91	0.24	389.30	389.09	-0.21	389.02	387.42	-1.60	384.21	385.79

Date/Time		PZ- 2_OUTSI DE	PZ- 2_INSIDE	PZ- 3_OUTSI DE	PZ- 3_INSIDE	PZ- 4_OUTSI DE	PZ- 4_INSIDE
07/01/2005	Daily Average	390.22	392.88	390.85	392.59	391.48	392.58
07/02/2005	Daily Average	389.66	392.92	390.33	392.61	391.11	392.52
07/03/2005	Daily Average	389.61	392.89	390.25	392.52	391.03	392.48
07/04/2005	Daily Average	389.83	392.75	390.46	392.44	391.12	392.40
07/05/2005	Daily Average	389.80	392.11	390.41	391.90	391.05	392.09
07/06/2005	Daily Average	389.52	391.49	390.13	391.30	390.85	391.65
07/07/2005	Daily Average	389.16	389.84	389.74	389.32	390.50	389.79
07/08/2005	Daily Average	388.78	387.99	389.32	387.21	390.04	387.66
07/09/2005	Daily Average	388.72	388.21	389.25	387.84	389.95	388.15
07/10/2005	Daily Average	387.89	388.25	388.51	388.88	389.50	389.31
07/11/2005	Daily Average	386.88	390.04	387.59	390.20	388.99	390.38
07/12/2005	Daily Average	386.29	391.86	387.06	391.34	388.64	391.17
07/13/2005	Daily Average	385.65	391.90	386.47	391.33	388.24	391.19
07/14/2005	Daily Average	384.61	391.93	385.49	391.21	387.61	391.05
07/15/2005	Daily Average	384.57	391.89	385.45	391.15	387.53	390.98
07/16/2005	Daily Average	383.69	391.74	384.63	390.99	386.99	390.86
07/17/2005	Daily Average	382.65	391.59	383.67	390.76	386.37	390.66
07/18/2005	Daily Average	381.67	391.40	382.71	390.53	385.71	390.44
07/19/2005	Daily Average	381.37	388.94	382.38	387.93	385.37	388.27
07/20/2005	Daily Average	380.63	385.98	381.54	384.82	384.64	385.51
07/21/2005	Daily Average	380.48	385.46	381.39	384.32	384.39	385.03
07/22/2005	Daily Average	380.64	385.97	381.52	384.96	384.32	385.48
07/23/2005	Daily Average	380.18	387.82	381.17	386.91	384.12	387.17
07/24/2005	Daily Average	379.97	387.75	380.94	386.85	383.93	387.10
07/25/2005	Daily Average	381.10	387.88	382.01	387.07	384.45	387.21
07/26/2005	Daily Average	381.86	387.97	382.73	387.26	384.86	387.36
07/27/2005	Daily Average	381.61	387.91	382.47	387.10	384.66	387.24
07/28/2005	Daily Average	381.08	387.74	381.97	386.91	384.35	387.02
07/29/2005	Daily Average	381.72	387.39	382.54	386.61	384.64	386.77
07/30/2005	Daily Average	381.49	387.67	382.34	386.90	384.50	386.92
07/31/2005	Daily Average	380.75	387.57	381.63	386.74	384.08	386.79